MIL-E-1/921C
31 October 1975
SUPERSEDING
MIL-E-1/921B
28 March 1967

MILITARY SPECIFICATION SHEET

ELECTRON TUBE, POWER

TYPE 805

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The complete requirements for procuring the electron tube described herein shall consist of this document and the latest issue of Specification MIL-E-1.

DESCRIPTION: Triode

See figure 1

Mounting position: Vertical with base down, or in horizontal position with pins 1 and 3 in vertical plane.

Weight: 8 ounces (226.8 grams) nominal

ABSOLUTE RATINGS: C Telegraphy

Parameter:	F	Ef	Eb	Ec	Ib	Ic	Pp	Pi
Unit:	MHz	V	Vdc	Vdc	mAdc	mAdc	W	W
Maximum:	30	10.5	1,500	-500	210	70	125	315
Minimum:	---	9.5	---	---	---	---	---	---
TEST CONDITIONS:	---	10.0 Vdc	1,500	---	---	---	---	---

GENERAL:

Qualification - Required

Ⓒ denotes changes

METHOD	REQUIREMENT OR TEST	NOTES	CONDITIONS	AQL (PERCENT DEFECTIVE)	INSPECTION LEVEL OR CODE	SYMBOL	LIMITS MIN	LIMITS MAX	UNIT
	Quality conformance inspection, part 1								
1201	Short and discontinuity detection	-		0.4	II	---	---	---	---
1301	Filament current	-		0.65	II	If	3.1	3.4	Adc
1256	Electrode current (1) (anode)	-	Ec = 0	0.65	II	Ib	60	90	mAdc
1236	Power oscillation (1)	-	Rg = 5,000 ohms; Ic = 45 to 70 mAdc; Ib = 210 mAdc; F = 15 MHz	0.65	II	Po	185	---	W (useful)
1231	Emission by oscillation	-	Power oscillation (1)	0.65	II	Ef	---	9.0	Vdc
1266	Total grid current	1	Eb = 2,000 Vdc; Ec/Ib = 78 mAdc; t = 120 seconds	0.65	II	Ic	0	-10.0	µAdc
	Quality conformance inspection part 2								
1031	Low-frequency vibration	-	Eb = 250 Vdc; Ec/Ib = 15 mAdc; Rp = 2,000 ohms	---	---	Ep	---	500	mVac
1256	Electrode current (positive grid)	-	Eb = 200 Vdc; Ec = 100 Vdc	---	---	Ic	80	130	mAdc
1256	Electrode current (2) (anode)	-	Eb = 200 Vdc; Ec = 100 Vdc	---	---	Ib	400	550	mAdc
1236	Internal insulation	-		---	---	---	---	---	---
1331	Direct-interelectrode capacitance	-		---	---	Cgp Cin Cout	5.1 6.2 6.5	7.3 9.0 11.7	pF pF pF
	Quality conformance inspection, part 3								
---	Life test	-	Group C; Pp = 125 W; Eb = 1,500 Vdc (max); t = 500 hours	---	---	---	---	---	---
---	Life-test end point:								
1231	Emission by oscillation	-		---	---	Ef	---	9.5	Vdc
1236	Power oscillation (2)	2	Rg = 5,000 ohms; Ic = 45 to 70 mAdc; Ib = 210 mAdc; F = 30 MHz	---	---	Po	170	---	W (useful)

NOTES:

1. This test to be performed at the conclusion of the holding period.

Ⓒ 2. This test shall be performed during the initial production and once each succeeding 12-calendar months in which there is production. A regular double sampling plan shall be used, with the first sample of three tubes with an acceptance number of one. In the event of failure, the test will be made as a part of quality conformance inspection, part 2, code level D, with an AQL of 6.5. The regular "12-calendar month" double sampling plan shall be reinstated after three consecutive samples have been accepted.

Custodians:
Army - EL
Navy - EC
Air Force - 85

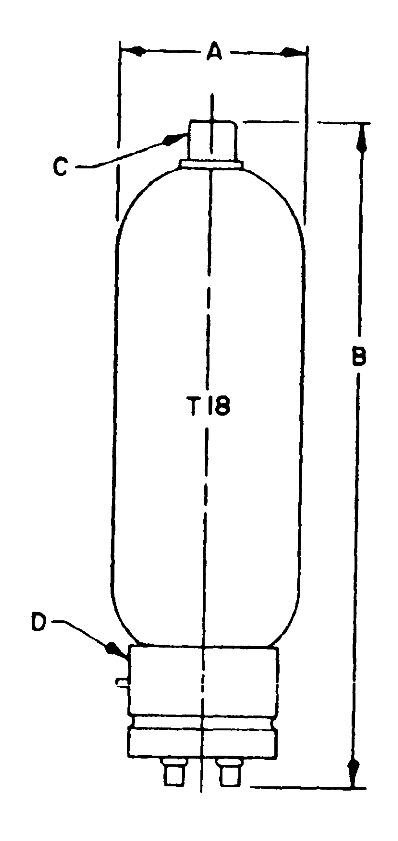
Review activities:
Air Force - 17, 80
DSA - ES

User activities:
Army - MU
Navy - AS, OS, MC, CG, SH
Air Force - 11

Preparing activity:
Navy - EC

Agent:
DSA - ES

(Project 5960-2991)



Ltr	Dimensions in inches with metric equivalents (mm) in parentheses	
	Minimum	Maximum
Quality conformance inspection, part 1		
A		2.312 (58.72)
B	7.594 (192.89)	8.500 (215.90)
Quality conformance inspection, part 3 (see note a)		
C	Cap: C1-5 (EIA)	
D	Base: A4-29 (EIA) (see note b)	

PIN CONNECTIONS	
Pin No.	Element
1	g
2	f
3	nc
4	f
Cap	a

NOTES:

a. Dimensions shall be checked during the initial production and once each succeeding 12-calendar months in which there is production. A regular double sampling plan shall be used, with the first sample of three tubes with an acceptance number of zero, and a second sample of three tubes with a combined acceptance number of one. In the event of failure, the test will be made as a part of quality conformance inspection, part 2, code level D, with an AQL of 6.5. The regular "12-calendar month" double sampling plan shall be reinstated after three consecutive samples have been accepted.

b. Dimension (a) for base A4-29 as shown in RS209A, section 2, sheet 26, shall be 45°±1°.

FIGURE 1. Outline drawing of electron tube type 805.

FOLD

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NAVAL ELECTRONIC SYSTEMS COMMAND
WASHINGTON, D. C. 20360

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SPECIFICATION ANALYSIS SHEET

Form Approved
Budget Bureau No. 22-R255

INSTRUCTIONS: This sheet is to be filled out by personnel, either Government or contractor, involved in the use of the specification in procurement of products for ultimate use by the Department of Defense. This sheet is provided for obtaining information on the use of this specification which will insure that suitable products can be procured with a minimum amount of delay and at the least cost. Comments and the return of this form will be appreciated. Fold on lines on reverse side, staple in corner, and send to preparing activity. Comments and suggestions submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or serve to amend contractual requirements.

SPECIFICATION

ORGANIZATION

CITY AND STATE	CONTRACT NUMBER

MATERIAL PROCURED UNDER A

☐ DIRECT GOVERNMENT CONTRACT ☐ SUBCONTRACT

1. HAS ANY PART OF THE SPECIFICATION CREATED PROBLEMS OR REQUIRED INTERPRETATION IN PROCUREMENT USE?

   A. GIVE PARAGRAPH NUMBER AND WORDING.

   B. RECOMMENDATIONS FOR CORRECTING THE DEFICIENCIES

2. COMMENTS ON ANY SPECIFICATION REQUIREMENT CONSIDERED TOO RIGID

3. IS THE SPECIFICATION RESTRICTIVE?

   ☐ YES ☐ NO *(If "yes", in what way?)*

4. REMARKS *(Attach any pertinent data which may be of use in improving this specification. If there are additional papers, attach to form and place both in an envelope addressed to preparing activity)*

SUBMITTED BY *(Printed or typed name and activity - Optional)*	DATE

DD FORM 1 JAN 66 1426 REPLACES EDITION OF 1 OCT 64 WHICH MAY BE USED.

S/N-0102-014-1801 C-25254